

TECHNICAL DATA SHEET

Production:
SC SAVER ALUMEN SRL
Bucharest / Tecuci, Romania

Sales Management:
SAVER GmbH
Düren, Germany

PL 3

TS 45 545-2 HL1-3 conf.

Rev.: 2015-05



PL3 is an electrical insulating material in form of rigid laminated sheets based on charged polyester resin reinforced with glass mats.

- ◆ **Good mechanical strength at ambient temperature**
- ◆ **Thermal class F (155°C)**
- ◆ **Self-extinguishing V-0 acc. UL 94**
- ◆ **Free from halogene**
- ◆ **Certified according EN 45 545-2**
- ◆ **UP GM 203 acc. IEC 60 893-3-5**

Form of delivery:

- Sheets in size 2.000 mm x 1.270 mm thickness from 1,0 mm to 40 mm
- Sheets in size 1.265 mm x 1.150 mm thickness from >35 mm to 70 mm
- Color: standard red, upon request white or grey

Typical applications:

- Railway applications
- Electrical insulating parts
- Bus bar supports
- Protective elements in electrical cabinets
- Low and high voltage switchgear

	Standard	Unit	Value
Mechanical Properties			
Flexural strength, RT	ISO 178	MPa	170
Tensile strength	ISO 527-4	MPa	90
Compressive strength, ⊥	ISO 604	MPa	300
Compressive strength, //	ISO 604	MPa	200
Impact strength, // (CHARPY)	ISO 179	kJ/m ²	70
Shear strength, in-plane	ASTM D3846	MPa	35
Electrical Properties			
Breakdown voltage, //	IEC 60 243	kV	40
Dielectric strength, ⊥	IEC 60 243	kV/mm	13
Comparative Tracking Index (CTI)	IEC 60 112	class	600
Inclined-Plane Tracking and Erosion	ASTM D2303	min	500
Physical Properties			
Density	ISO 1183	g/cm ³	1,85
Water absorption	ISO 62, M.1	%	0,20
Arc resistance	IEC 61 621	s	190
Flammability	UL 94	class	V-0
Thermal class	- - -	°C	155
Calorific value	ISO 1716:2002	MJ/kg	7,76
Other Properties			
Fire behaviour	UNI CEI 11170-3	class	LR4
Requirements for fire behaviour	CENT/TS 45545-2	class	HL3
Ignitability, single-flame source test	EN ISO 11925-2:2002		fulfilled
Fire behaviour	AFNOR NF F 16-101	class	F1 / I1
Opacity of the fumes	NF X10-702-2:1994	Flaming VOF4	30,3
Toxicity index	NF X10-702-1:1995		
	NF X70-100-1	ITC	6.54

Note: Technical values indicated in this data sheet are intended for reference purpose only and are not binding.



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